

REMARKS

Claim 9 has been amended to correct a typographical error. No new matter is presented by these amendments.

Applicant respectfully requests reconsideration of the rejection of claims 1, 4-6, 8-11, 15, 18-24, 39-42, 45, and 47-48 under 35 USC Section 103(a) as being unpatentable over *Rangachari et al.* (“*Rangachari*”) (US Patent 6,470,227), in view of *Tadokoro et al.* (“*Tadokoro*”) (US Patent 6,463,352), further in view of *Tenney et al.* (“*Tenney*”) (US Patent 6,944,584), further in view of *Haverstock* (US 6,192,415). As discussed in further detail below, the combined teachings of these references do not disclose each and every feature of Applicant’s independent claim 1.

Applicant’s independent claim 1 is drawn to a tool management method executed by a tool server apparatus coupled to both a remote client system and a plurality of tools via distinct networks. According to the claimed method, a first request is received from the remote client system, and in response to the first request, a first message is set to a tool. Applicant’s have amended claim 1 to specify that the first message is operable for initiating processing on the tool, and that the logical description provided by the claimed tool object model enables the initiation of the processing. Support for these amendments may be found in the Applicant’s as-filed specification, by way of example, at pages 28-29.

The *Rangachari* reference teaches a method of automating a microelectronic manufacturing process by configuring application objects that implement a domain knowledge for a piece of equipment and implementing a workflow using the application object. However, as noted by the Office, *Rangachari* does not disclose the Applicant’s claimed features of receiving a first request from a remote client system containing a uniform resource locator path including a function field and an object field as claimed. Nor does *Rangachari* disclose the object field and the function field identifying a tool object model as claimed. As noted above, applicants have amended independent claim 1 to specify that the logical description provided by the tool object model enables initiation of processing on a tool.

Tadokoro teaches a plurality of cutting machines, each cutting machine having a monitor input device through which monitor data indicating the status of the cutting machine is input, and a plurality of virtual machine components for collecting the monitor data. However, while *Tadokoro* teaches various embodiments for monitoring the status of cutting machines, *Tadokoro* does not teach the claimed tool object model providing a logical description which enables the initiation of processing on a tool. The cited portions of *Tadokoro*, Col. 4, lines 45-65 and Col. 26, lines 45-65, relate to a virtual machine component and a job order user interface. However, *Tadokoro*'s virtual machine component merely scans instrumentation and maintains status information, and is not capable of initiating processing on a tool. And *Tadokoro*'s job order user interface merely allows one to place a job order, as *Tadokoro* teaches that jobs must be manually initiated and later confirmed as complete. Therefore, *Tadokoro*'s job order user interface also is not capable of initiating processing on a tool. *Tadokoro*, Col. 28, lines 26-45. As such, neither *Tadokoro*'s virtual machine component nor the job order user interface discloses a tool object model providing a logical description which enables initiation of processing on a tool as claimed.

In the Office Action, the Examiner apparently miscasts Applicant's arguments regarding *Tadokoro*'s requirement of manual initiation of job orders. Applicant's claimed method is executed by a tool server apparatus. The claimed first request may be received from a remote client system as a result of a human operator's action. However, the actual claimed method operations do not require a human operator. According to the Applicant's claimed method, the first request identifies a tool object model which provides a logical description that enables initiation of processing on a tool, and results in a first message which is operable for initiating processing on a tool. *Tadokoro* merely teaches monitoring of cutting machines and a job order form that does not enable initiation of the job orders. Thus, Applicant respectfully submits that *Tadokoro* cannot teach a logical description that enables initiation of processing on a tool as claimed. For in the case of *Tadokoro*'s virtual machine component, no features are disclosed for initiation of processing. And in the case of *Tadokoro*'s job order interface, Applicant simply points out that a job order interface which then requires manual initiation is not equivalent to a logical description which enables initiation of processing as part of an automated method executed by a tool server apparatus as claimed.

Moreover, *Tadokoro* does not teach Applicant's claimed method operation of awaiting an initiate processing acknowledge from the tool, and upon receipt of said initiate processing acknowledge from the tool, awaiting an event report from the tool indicating completion of the action. For these features of Applicant's claim, the Office cites Col. 18, lines 20-25 and Col. 19, lines 50-55 of *Tadokoro*. However, these portions of *Tadokoro* merely disclose a machine monitor which sends requests to virtual machine components for status updates, and a status field as a part of a job table which may have the values of waiting, processing, or completed. Applicants submit that *Tadokoro's* teaching of receiving status updates from a virtual machine is not equivalent to the claimed method operation of awaiting an initiate processing acknowledge from the tool itself, followed by awaiting an event report from the tool indicating completion of the action. For while *Tadokoro's* discloses repeated requests to virtual machine components for status updates, these are not specifically directed to the receipt of an initiate processing acknowledge or an event report.

Additionally, Applicant has amended claim 1 to further specify that upon receipt of the event report, a message is sent to the tool acknowledging the receipt of the event report. *Tadokoro* does not teach that such a message is sent to a tool in response to receiving an event report, because *Tadokoro* merely teaches status updates rather than awaiting a specific message such as an event report.

Haverstock is directed to a system for enabling access to non-HTML objects from a web browser. Specifically, *Haverstock* teaches the use of a URL which identifies an object, and "enables non-HTML actions to be identified in the URL and the action to be performed on or relating to the object" (Col. 5, lines 19-28). However, the combination of the teachings of *Haverstock* and *Tadokoro* would not achieve the aspects of Applicant's claimed invention for which these references are cited. *Haverstock* teaches retrieval of virtual objects and actions carried out on those virtual objects. Whereas, *Tadokoro* teaches a database server which "maintains a database of descriptive information describing the instrumented cutting machines and that is responsive to queries." *Tadokoro*, Col. 4, lines 47-49. *Tadokoro's* database is merely an intermediate monitoring component that facilitates transmission of status information. As discussed above, *Tadokoro* fails to disclose a system capable of actually initiating processing on

a tool. Thus, the cited teachings of *Haverstock* and *Tadokoro* in combination fail to teach a system capable of initiating processing carried out by a processing tool as designated in fields of a URL, as claimed by the Applicant.

For at least the foregoing reasons, claim 1 is patentable over the prior art teachings of *Rangachari*, *Tadokoro*, *Tenney*, and *Haverstock*. Claim 15 recites a data processing system analogous to the teachings of claim 1, and is therefore patentable over the prior art for at least the same reasons as claim 1. Likewise, Claims 4-6, 8-11, 18-24, 39-42, 45, and 47-48 are patentable over the prior art for at least the reason that each of these claims depends from claim 1 or 15.

Applicant respectfully request reconsideration of the rejection of claims 12-13, 25-26, and 49-54 under 35 U.S.C. 103(a) as being unpatentable over *Rangachari*, in view of *Tadokoro*, further in view of *Tenney*, further in view of *Haverstock*, and further in view of *Nilsen et al.* ("*Nilsen*") (US 6,081,665).

Claims 12-13, 25-26, and 49-54 each depend from claims 1 or 15. The deficiencies of the prior art with regard to claims 1 and 15 have been discussed above. Therefore claims 12-13, 25-26, and 49-54 are patentable over the cited art for at least the foregoing reasons, and by virtue of their dependence from claims 1 or 15.

Furthermore, with regard to these claims, the Office states that *Tenney* "strongly suggests overriding existing control programs with user-designed programs." However, the teachings of *Tenney* do not mention overriding a tool object method as claimed. Therefore, the Office is kindly requested to clarify how *Tenney* suggests this aspect of the Applicant's claimed subject matter.

New Claims 55-57

Applicants have added new claims 55-57, which are drawn to additional embodiments of the invention which are not taught by the prior art. Each of these claims depends from or includes features analogous to those of claims 1 and 15, and are therefore patentable for at least the same reasons as claims 1 and 15, as discussed above. Additionally, these claims are drawn to features of a remote processing control method that is invoked in response to the claimed first

request, the remote processing control method performing operations of sending the first message to the tool, awaiting the initiate processing acknowledge, and awaiting the event report. As these features are not taught by the prior art, claims 55-57 are additionally patentable over the prior art for at least these reasons.

Conclusion

In view of the foregoing amendments to the claims and the above remarks, Applicant respectfully submits that the pending claims are in condition for allowance.

A Notice of Allowance is respectfully requested. If any questions remain, the undersigned can be contacted at (408) 749-6913.

If any additional fees are missing or due, please charge to **Deposit Account No. 50-0805** (Order No. ASTGP123).

Respectfully submitted,
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